

## Taylor University Pillars at Taylor University

---

Celebration of Scholarship

Campus Events

---

4-27-2018

# 2018 Celebration of Scholarship:

Taylor University

Follow this and additional works at: <https://pillars.taylor.edu/celebration-of-scholarship>

Part of the [Scholarship of Teaching and Learning Commons](#)

---



Celebration of Scholarship  
*April 27, 2018*

Welcome to  
Taylor University's 2018 Celebration of Scholarship

Within every true learner resides the heart of an explorer – someone who possesses the inner compulsion to push the boundaries of personal and societal knowledge beyond present-day limits. Taylor University's Faculty Mentored Undergraduate Scholarship (FMUS) program is designed to equip students for ever-deepening explorations into real world problems of significance to them and to society. It is a unique venue in which students have the opportunity to apply what they have learned in courses and co-curricular experiences to complex, open-ended questions. In doing so, the abilities of students to think critically, creatively and from a faith perspective are stretched as never before.

Perhaps even more importantly, faculty and students are afforded the opportunity to develop substantial relationships centered on intellectual growth but which can readily and naturally expand to professional, personal and spiritual mentoring – which is at the core of Taylor's Christian liberal arts education.

I hope you enjoy the oral and poster presentations of today's scholarship celebration. They represent some of the best collaborative efforts of our faculty and students. I also hope you are reminded frequently that each presentation represents a story of exploration and intentional discipleship.

Enjoy!



Jeff Moshier, Ph.D.  
Provost

## Presentations

April 27th:

Faculty PechaKucha Presentations

Student Oral Presentations

Poster Presentations

Biblical Studies

Biology

Chemistry

Computer Science & Engineering

Education

Independent Study

Kinesiology

Psychology

Varying Dates:

Department Presentations

Art Shows

Music Recitals

# Oral Presentations

## **Cornwall (Room 103)**

- 2:00PM Opening Remarks
- 2:10PM Last Year at the Crossing, [Kathy Bruner](#), *Art, Film & Media*
- 2:20PM How do American Christians Engage in the Great American Holiday of Halloween? [Robert Priest](#), *Sociology*
- 2:30PM Dimensions of Datacenter Demand Response  
[Josiah McClurg](#), *Physics & Engineering*
- 2:40PM Halfway There: Reflections on Body and Spirit  
[Jeremie Riggleman](#), *Art, Film & Media*
- 2:50PM Grounded, [John Bruner](#), *Art, Film & Media*
- 3:10PM Human Trafficking and Short Term Missions  
[Brandon George](#), *Sociology*, *Faculty Mentor: Robert Priest*
- 3:25PM Orphan Development and the Effects of Short Term Missions,  
[Lydia Maloney](#), *Sociology*, *Faculty Mentor: Robert Priest*
- 3:40PM The Taylor MacDonald Hamlet Manuscript: A Project of Descriptive and Interpretive Bibliographic Scholarship  
[Kendra Smally & Kaylen Dwyer](#)  
*English*, *Faculty Mentors: Joe Ricke, Ashley Chu*
- 3:55PM The Research and Design of a Youth Writing Camp at Taylor University: WORDshop 2018  
[Hannah Perry & Hillary Foreman](#)  
*English*, *Faculty Mentor: Carrie King*
- 4:10PM Questions for All Presenters

## **Jacobson I (Room 145)**

- 3:10PM The Effects of Caffeine on Anaerobic Power in Trained Sprint Cyclists, [Keely Krebs & Cara Walker](#)  
*Kinesiology*, *Faculty Mentor: Dawn Anderson*
- 3:25PM ThinSat: Phantom Circuit Implementation and Data Collection within a Picosatellite  
[Justin Theien, Chester Chan, Austin Wolgemuth & Eliza You](#)  
*Computer Science & Engineering*, *Faculty Mentor: Bill Bauson*
- 3:40PM Religious Freedom and Secondary Education: Protecting a Healthy Public Square  
[Claire Bokma & Bella Purcell](#), *History, Global & Public Policy*  
*Faculty Mentor: Nicholas Kerton-Johnson*
- 3:55PM Designing an Apparatus to Carry Out the Ceria-Methane Redox Cycle to Produce Syngas  
[Isaac Bowser, Josh Granger & Mikey Maloney](#)  
*Physics & Engineering*, *Faculty Mentor: Peter Krenzke*
- 4:10PM Questions for All Presenters

## **Wilberforce (Room 240)**

- 3:10PM Grounded, [Natalie Francis & Jon Meharg](#)  
*Art, Film & Media*, *Faculty Mentor: John Bruner*
- 3:25PM Last Year at the Crossing, [Niko Hays & Paul Burris](#)  
*Art, Film & Media*, *Faculty Mentor: Kathy Bruner*
- 3:40PM Now in 3-D: Fluorescent Dynamics of Developing Cells  
[Alexander Hord, Han Chang & Won Chang](#)  
*Biology*, *Faculty Mentor: Jessica Vanderploeg*
- 3:55PM The Taylor University Student's Views on Racial Inequality  
[Cora Herbkersman](#), *Sociology*, *Faculty Mentor: Steven Bird*
- 4:10PM Questions for All Presenters

# Poster Presentations

---

## **Biblical Studies**

Where Wisdom May Be Found: The Eternal Purpose of Integrated Christian Education, [Ed Meadors](#)

## **Biology**

A Study of Sciatic Nerve Function from Frogs under Hypoxic Conditions  
[Ben Hood](#), [Brode Breuker](#) & [Rachel Walters](#)  
*Faculty Mentor: Brian Dewar*

Fruit Fly Research: Pointing Us in the Right Direction: A Genetic Approach to Identify Novel PCP Candidates  
[Jhasmyne Rutherford](#), [Lindi Moore](#) & [Carsyn Reynolds](#)  
*Faculty Mentor: Jessica Vanderploeg*

The Effect of Caffeine on Muscle Tension and Fatigue Time in the Gastrocnemius Muscle of R. Papiens  
[Christian Allen](#), [Elizabeth Bjornsen](#), [Taylor Christophel](#) & [Caroline Potter](#)  
*Faculty Mentor: Brian Dewar*

The Effects of Distension and Time on the Force Required for a Heart to Beat, [Thomas Britton](#), [Evan Livingston](#) & [YeJong Yoo](#)  
*Faculty Mentor: Brian Dewar*

Ultraviolet Mating Signals among Society Finches  
[Theresa Doiron](#), [Kyle Kempton](#) & [Erin Ricks](#)  
*Faculty Mentors: Brian Dewar, Jan Reber*

## **Chemistry**

Ammonium Ligand Binding to dibenzo-18-crown-6 in Solvent  
[Brielle Tilson](#), [Brandon Magers](#), [David Reha](#), [Babak Minofar](#), [Istavan Pelczer](#) & [Jannette Carey](#)  
*Faculty Mentor: D. Brandon Magers*

Characterization of the Mass Spectra Energetics of 1-Propanol Derivatives via Ab Initio Methods, [Ally Burke](#)  
*Faculty Mentor: D. Brandon Magers*

## **Computer Science & Engineering**

Student Process Visualization, [Andrew Olin](#)  
*Faculty Mentor: Jon Denning*

## **Education**

Pedagogical Strategies for Building Critical Thinking Dispositions in Studying the Achievement Gap, [Carol Sisson](#)

## **Independent Study**

The Curse of Nakedness: African Women's Use of the Naked Body in Resistance, [Stephanie Mithika](#)  
*Faculty Mentor: Sue Gavin*

African American Male Identity Development, [Trayvon Estey](#)  
*Faculty Mentor: Sue Gavin*

## **Kinesiology**

An Acute Study of High Intensity Exercise and the Effects on Sleep Efficiency in Children, [Alison Broersma](#), [Annie Neideck](#) & [Jonah Bourassa](#)  
*Faculty Mentors: Jeff Marsee*

A Progressive Barefoot Running Program Improves Running Economy and Performance, [Becca Brummel](#) & [Phebe Biggar](#)  
*Faculty Mentor: Matthew Renfrow*

Community Health Intervention at the Red Barn  
[Alex Jung](#), [Karissa Moss](#) & [Marcelo Villalobos](#)  
*Faculty Mentor: Jeff Marsee*

## **Psychology**

Impact of Frequency and Effectiveness of Active Learning Strategies  
Utilized within the Classroom

Olivia Hockett, Laura Roggenbaum & Angelique Celaya

*Faculty Mentor: Stephen Snyder*

Impact of Time Abroad on Perceived Intercultural Competency Growth:  
A Question of Gender Differences, Rachael Schwulst & Lakeisha Eglaus

*Faculty Mentor: Stephen Snyder*

Intercultural Longitudinal Research, Kelly Sisson & Abigail Roth

*Faculty Mentor: Stephen Snyder*

Racial Identity Formation of Transracial Adoptees: A Focus on Emerging  
Adulthood, Darrah Moul, Alaina Gegner, Anna Hertzler, Rachel Schwulst,  
Diane Dungan & Scott Moeschberger

*Faculty Mentor: Scott Moeschberger*

Student Development for Implementation of Habits of Mind

Emily Zilz, Nina Siems & Abbey Bolander

*Faculty Mentor: Stephen Snyder*

The Effects of Cell Phone Use on Intelligence Tests

Mackenzie Batson & Cassie Kuizin

*Faculty Mentor: Stephen Snyder*

The Effect of Class on Spiritual Growth in Students who Study Abroad

Rachel O'Connor & Natalie Duncan

*Faculty Mentor: Stephen Snyder*

## **Sociology**

The Taylor University Student's Views on Racial Inequality

Cora Herbkersman



*Faculty Sponsor: Steven Bird*

# — Department Presentations —

## **Art Shows**

Graphic Design Senior Show (December 1, 2017)

Megan Harkness-Holt

*Graphic Design, Faculty Sponsor: Ryan James*

Discovery M.A.A.R.R.S. (March 9, 2018)

Megan Kammer, Pre-Art Therapy

Ally Midgley, Studio Art

Amanda Felter, Art Education

Rachel Kayes, Art Education

Rachel Golliher, Art Education

Susan Denny, Studio Art

*Studio, Art Education & Pre-Art Therapy*

*Faculty Sponsors: Jeremie Riggleman & Kathy Herrmann*

Amalgamated (April 6, 2018)

Ryan Bartz

Isaac Beaverson

Nick Chiodras

Leslie Clouse

Rachel Kinsel

Sammi Lawson

Wes Noyes

Jenna Shanks

Jacie Smeltzer

Izzy Spitz

Nick Yonce

*Faculty Sponsor: Ryan James*

## **Music Recitals**

Senior Recital (December 1, 2017)  
Alexis Turner (soprano)

Senior Recital (April 7, 2018)  
Abigail Sandy (soprano)

Faculty & Junior Recital (April 13, 2018)  
Chris Bade & Leon Harshenin  
Hasun Yoo (violin)

Senior Recital (April 29, 2018)  
Joshie Kongmaneechachawal (guitar)  
Augusta Bailey (piano)

Senior Recital (May 4, 2018)  
Alyssa Henrikson (flute)  
Kevin Copeland (trumpet)

Senior Recital & Junior Recital (May 6, 2018)  
Caroline York (flute)  
Katherine Gruendyke (piano)

Senior Recital (May 11, 2018)  
Gardner Stewart (piano and saxophone)

Senior Recital (May 12, 2018)  
Erin Davis (soprano)

Senior Recital (May 13, 2018)  
Clara Loisch (flute)

---

## Publications

---

### **Art, Film & Media**

Smith, R. Ed. (2018). Divine provision and the 'preternatural imagination' of Edward Burne-Jones in the mosaics of "The American Church" in Rome. *Religion and the Arts* 22(1-2).

### **Biblical Studies, Christian Ministries & Philosophy**

Harbin, M. (2018). Holiness: Moral purity between the persons of the trinity. *Bibliotheca Sacra*, 175, pp. 17-33.

Harbin, M. (2018) Review of the book *The Lost World of the Israelite Conquest*, by John H. Walton and J. Harvey Walton. *Journal of the Evangelical Theological Society*, 61:1 pp.153-155.

Harbin, M. (in press). Review of the book *How I Changed My Mind About Evolution: Evangelicals Reflect on Faith and Science*, K. Applegate and J. B. Stump, (Eds.) *JETS*.

Heth, W.A. (in press). Divorce and remarriage In E. Thoennes et al. (Eds.), *Marriage: Its Foundation, Theology, and Mission in a Changing World*. Chicago, IL: Moody Press.

MaGee, G. (2017). Biblical theology in the service of ecumenism: Eschatology as a case study. *Explorations in Interdisciplinary Reading: Theological, Exegetical, and Reception-Historical Perspectives*, pp. 186-205.

MaGee, G. (in press). *Studying Paul's Letters with the Mind and Heart*. Grand Rapids, MI: Kregel.

Seeman, B. (2017). Korsgaard, Christine, In M. Sellers & S. Kirste (Eds.), *Encyclopedia of the Philosophy of Law and Social Philosophy*. New York, NY: Springer.

Spiegel, J. S. (2017). Contest and indifference: Two models of open-minded inquiry *Philosophia: Philosophical Quarterly of Israel* 45(2) pp. 789-810.

Spiegel, J. S. (2017). The ethics of virtual reality technology: Social hazards and public policy recommendations *Science and Engineering Ethics* 23(5).

Spiegel, J. S. (2018). A great cloud of moral witness: The solid historical consensus on homosexual practice. *Touchstone* 31(1).

Spiegel, J. S. (2018). The sexual pluralist revolution: Reasons to be skeptical" in J. Walls, J. Neill, and D. Baggett (Eds.), *Venus and Virtue: Celebrating Sex and Seeking Sanctification*. Eugene, OR: Cascade Books.

Spiegel, J. S. (in press). Philosophy as the love of wisdom in *Where Wisdom May Be Found*

Spiegel, J. S. (in press). Gospel nakedness in marriage: From sin and shame to relational wholeness, in *Theology of Marriage*. Chicago, IL: Moody Press.

Spiegel, J. S. (in press). Immaterialism as a boon to faith: Berkeley and Christian theology" in *Christianity and the Modern Philosophers*. Grand Rapids, MI: Zondervan.

## **Business**

Little, J. & Fox, P. (2017). Developing an Engaging Online Engineering Ethics Course for Future Engineers. In A.V. Senthil Kumar (Ed.), *Optimizing Student Engagement in Online Learning Environments*.

Little, J., Gaier, S. & Spoutz, D. (2017). The Role of Values, Beliefs, and Culture in Student Retention and Success. In R. Black (Ed.), *Critical Assessment and Strategies for Increased Student Retention*.

## **Chemistry**

Kneer, M. and **King, D.** (2017). Open-loop geothermal discharge stream design affects the precipitation of calcium, In *Proceedings of the Indiana Academy of Science*, 126, pp. 42-47.

Stan, P. L. (2015, March). A quiz that promotes discussion and active learning in large classes. *Active Learning: A Practical Guide for College Faculty*. 29 (3), p. 1.

## **Education**

Tyner, C. & Graber, B. (2017). A qualitative study of cross-cultural skills growth: An international teaching practicum in the Philippines. *The Field Experience Journal* 20(Fall). pp.46-61

## **English**

Moore, J. (2017). 5 poems included in the anthology, in D.S. Martin (Ed.) Adam, Eve, and the Riders of the Apocalypse: 39 Contemporary Poets on the Characters of the Bible, *The Poiema Poetry Series*, Eugene, OR: Cascade Books.

Moore, J. (2017). I never met a flower that yelled at me. *New Ohio Review*.

Moore, J. (2017). In which the magpie resurrects the voice of Henry David Thoreau. *The Ekphrastic Review*.

Moore, J. (2017). Barley moon," *Paterson Literary Review*.

Moore, J. (2018). Nocturne. *Briar Cliff Review*.

Moore, J. (2018). Clear water. *ASCENT*

Moore, J. (2018). Full long nights moon. *Windhover*

Moore, J. (in press). Silent night. *Relief Journal*.

Moore, J. (2018). Molasses & commentary on Doug Ramspeck's curries in Graham Hilliard (Ed.) *The Cumberland River Review: The First Five Years*.

Moore, J. (2018). Full worm moon: A book of poems, *The Poiema Poetry Series*, Eugene, OR: Cascade Books.

Ricke, J. (2018). Snarky shrews: Gender comedy and the use of sarcasm. In A. Bagona & E. L. Rambo (Eds.), *Words that Tear the Flesh: Essays on*



*Sarcasm in Medieval and Early Modern Literature and Cultures*. Boston, MA: De Gruyter.

### **Environmental Science, Public Health & Sustainable Development**

Rhodes, S.D., Mann-Jackson, L., Alonzo, J., Siman, F.M., Vissman, A.T., Nall, J., Abraham, C., **Aronson, R.E.** and Tanner, A. (2017). Engaged for change: A community engaged process for developing interventions to reduce health disparities. *AIDS Education and Prevention*, 29(6), pp. 491-501. doi:10.1521/aeap.2017.29.6.491.

Strack, R. W., **Aronson, R. E.**, Orsini, M. M., Seitz, C. M., & McCoy, R. (in press). Looking through the lens of black males on a predominantly white campus: Using photovoice to uncover issues and advocate change. *Journal of College Student Development*.

### **Higher Education**

Braxton, J. M. and **Ream, T.C.** (2017). The Scholarship of Practice and Stewardship of Higher Education.” Toward a Scholarship of Practice. Jossey-Bass, pp. 95-102.

Ream, T. C. (2017). Bearing the Truth: An Interview with Linda A. Livingstone.” *Christianity Today*, September, pp. 54-58.

Ream, T. C. (2018). [Review of Zachary Purvis’ Theology and the University in Nineteenth Century Germany]. *The Heythrop Journal*, 59(2). pp. 303-305.

### **Kinesiology**

Anderson, D. E. (2017). Beneficial roles of caffeine in sports nutrition and beverage formulations, In D. Bagchi (Ed.), *Sustained Energy for Enhanced Human Functions and Activity*, (pp. 321-335). doi: 10.1016/B978-0-12-805413-0.00020-X.

### **Mathematics**

Case, J. (2017). Mathematics without apologies: An extended review [review of *Mathematics without Apologies: Portrait of a Problematic Vocation*, by M. Harris]. *Christian Scholars Review* XLVI: 4 pp. 393-400.

Case, J. (2018). Updated differential equations workbook using MATLAB in Nagle, Saff and Snider (Eds.), *Fundamentals of Differential Equations* (9th edition) Pearson.

Rodman, D. (2018). An infinite family of links with central bridge spheres. *Algebraic and Geometric Topology* 18(1). pp. 153-186. doi:10.2140/agt.2018.18.153

### **Modern Languages**

Chang, A., Chang, H., Chang, W., Kiers, G., & Meyer, A. (2018). Vocabulary learning vs. vocabulary acquisition. In F. Cooley, M. Everdell, H. Al Bulushi, A. G. Lorenzo, L. Orjuela, & S. D. Gualapuro Gualapuro (Eds.), *Proceedings of the 17th Texas Linguistic Society* (pp. 17- 26).

### **Psychology**

Cosgrove, M. (2018). *The Brain, the Mind, and the Person Within: The Enduring Mystery of the Soul*. Kregel Publications.

### **Social Work**


Kendall, J. & Anglewicz, P. (2017). “Characteristics associated with migration among older women and men in rural Malawi.” *Illness, Crisis and Loss*. 1-26

Kendall, J. & Anglewicz, P. (Provisional Acceptance). “Migration and health in older age in rural Malawi.” *Global Public Health*

### **Student Development**

Barrett, S. (2017) *Operationalizing humility: Virtue development in college student leaders*. Ann Arbor, MI: ProQuest Publishing.

Moser, D. & Fankhauser, J. (2018). *Ready or not: Leaning into life in our twenties*. Colorado Springs, CO: NavPress. Dean, SSEB

Sommers, R.C. (2018)  [Review of the book *Teach from the Heart: Pedagogy as Spiritual Practice*]. *Christian Higher Education*, 17(1-2), 113-115, DOI: 10.1080/15363759.2018.1406260

